Drought Information Statement for Montana
Valid March 13, 2024

Issued By: NWS Great Falls, NWS Missoula

Contact Information:

- This product will be updated April 30, 2024 or sooner if drought conditions change significantly.
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/TFX/DroughtInformationStatement for previous statements.
U.S. Drought Monitor

- D3 Drought conditions are developing in Montana

- Drought intensity and Extent
  - D4 (Exceptional Drought): None occurring
  - D3 (Extreme Drought): Portions of the Rocky Mountain Front and east of Missoula
  - D2 (Severe Drought): Scattered areas over Western and Southern MT
  - D1 (Moderate Drought): Much of Western MT, Southern MT and portions of Northeast MT
  - D0: (Abnormally Dry): Much of Montana

Link to the latest U.S. Drought Monitor for Montana
Recent Change in Drought Intensity

- Four Week Drought Monitor Class Change.
  - Drought Worsened: The drought did get slightly worse over portions of Western, Central and Eastern MT.
  - No Change: No change in drought conditions over the past month were observed over portions of the state.
  - Drought Improved: Small areas of improvement were seen over the western half of the state in the past month.

Link to the latest 4-week change map for Montana.
Precipitation

- February did have an increase in precipitation amounts, especially over portions of North Central MT.

- Only a small portion of northwest MT and far Southeast MT had below average precipitation for February.
For temperatures, the eastern one third of the state had above normal temperatures for February, while much of western two thirds of the state had below normal temperatures.
Summary of Impacts

Links: See/submit [Condition Monitoring Observer Reports (CMOR)](https://example.com) and view the [Drought Impacts Reporter](https://example.com)

Hydrologic Impacts

- Mountain snowpack is below normal for this time of year
- Our mountains are not only below normal, but close to record low for the date in terms of SWE. There's a real concern for water supply issues as we move thru the middle and late summer, assuming we don't get a lot of high elevation snow in the next couple months.

Agricultural Impacts

- Possible impacts to winter wheat and grasslands

Fire Hazard Impacts

- Possible concerns later this spring if we melt out quickly and don’t receive spring moisture

Other Impacts

- Fishing and water impacts on rivers are possible this summer

Mitigation Actions

- Reminder, low snowpack does not mean you can’t flood. Flooding is possible at any time until the snow melts out of the mountains. Flood insurance needs to purchased 30 days in advance.
Much of MT has streamflow that is considered normal for this time of year.

Image Caption: USGS 7 day average streamflow HUC map valid March 9, 2024
Agricultural Impacts

- Northwest MT continues to be an area area soil moisture ranking is very low.
Fire Hazard Impacts

- Fire impacts are possible on grasslands a few weeks after they dry out and before they have the spring green up.
- For the mountains, fire season will occur after the snow melts out.

[Link to Wildfire Potential Outlooks from the National Interagency Coordination Center.]
Seven Day Precipitation Forecast

- Some rain/snow is expected to fall over the western and southern portions of the state this week.

- However, much of North Central and Northeast MT are expected to remain mostly dry this week.
Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day Temperature Outlook and Precipitation Outlook.

- No significant hazards are expected over Montana from March 8th thru the 14th at this time.
Long-Range Outlooks

The latest monthly and seasonal outlooks can be found on the CPC homepage

- Above normal temperatures are favored for Montana as we go into Spring.

- Additional, near normal chances for precipitation are favored for all of MT expect Northwest MT, where below normal precipitation is favored.
Drought Outlook

The latest monthly and seasonal outlooks can be found on the CPC homepage

- Drought conditions are expected to continue over Western, Southern and far Northeast MT.

- Some expansion in the drought is possible over North Central MT and the southern portions of Northeast MT.

Links to the latest:
Climate Prediction Center Monthly Drought Outlook
Climate Prediction Center Seasonal Drought Outlook